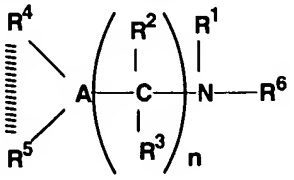
Listing of Claims

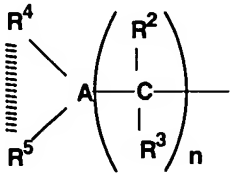
1. (previously presented) A method for preparing a polyurethane foam which comprises reacting an organic polyisocyanate and a polyol in the presence of water as a blowing agent, a cell stabilizer, and a catalyst composition represented by formula (I):



(I)

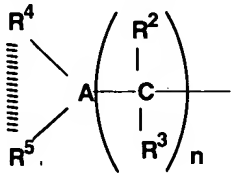
wherein A represents CH or N;

R^1 represents hydrogen and R^6 represents $-CH_2C(R^7)(OH)CH_2OR^8$; or

R^1 represents  and R^6 represents $-CH_2C(R^7)(OH)CH_2OR^8$; or

R^1 represents $-CH_2C(R^7)(OH)CH_2OR^8$ and R^6 represents an alkyl or alkenyl group having C_4-C_{36} carbon atoms; or

R^1 represents hydrogen and R^6 represents $-CH_2C(R^7)(OH)R^8$; or

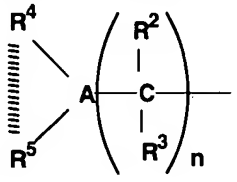
R^1 represents  and R^6 represents $-CH_2C(R^7)(OH)R^8$; or

R^1 represents $-CH_2C(R^7)(OH)R^8$ and R^6 represents an alkyl or alkenyl group having C_4-C_{36} carbon atoms;

R^2 and R^3 each represent hydrogen or an alkyl or alkenyl group having C_1-C_6 carbon atoms;

R^4 and R^5 each represent an alkyl group having C_1-C_6 carbon atoms when A represents N; or

R^4 and R^5 together represent a C_2-C_5 alkylene group when A represents N; or

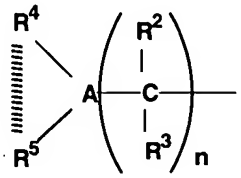
R^4 and R^5 together represent a C_2-C_5 alkylene group containing NR^{10} or NR^{11} when A is CH or N, where R^{10} is hydrogen or an alkyl group having C_1-C_4 carbon atoms and R^{11} is an alkyl group having C_1-C_4 carbon atoms or 

;

R^7 represents hydrogen or an alkyl or alkenyl group having C_1-C_5 carbon atoms;

R^8 represents an alkyl or alkenyl group having C_4-C_{36} carbon atoms or $-COR^9$, where R^9 represents an alkyl or alkenyl group having C_3-C_{35} carbon atoms; and

n is an integer from 1 to 3, and where the catalyst composition is acid-blocked.

2. (original) The method of claim 1, wherein R^1 is hydrogen or 

3. (original) The method of claim 1, wherein R^2 and R^3 are hydrogen.

4. (original) The method of claim 1, wherein R^4 and R^5 are alkyl groups having C_1-C_6 carbon atoms when A represents N.

5. (original) The method of claim 1, wherein R^4 and R^5 together represent $-CH_2CH_2N(CH_3)CH_2-$.

6. (original) The method of claim 1, wherein R^7 is hydrogen.

7. (original) The method of claim 1, wherein R^8 is an alkyl or alkenyl group having C_4-C_{22} carbon atoms or $-COR^9$.

8. (original) The method of claim 1, wherein R^9 is an alkyl or alkenyl group having C_3-C_{22} carbon atoms.

9. (original) The method of claim 1, wherein n is 2 or 3.

10. (previously presented) The method of claim 1, wherein the catalyst composition is selected from the group consisting of N,N-bis-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-octadecyl ether) amine, N-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-octadecyl ether) amine, N,N-bis-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-hexadecyl ether) amine, N-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-hexadecyl ether) amine, N,N-bis-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-tetradecyl ether) amine, N-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-tetradecyl ether) amine, N,N-bis-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-dodecyl ether) amine, N-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-dodecyl ether) amine, N,N-bis-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-decyl ether) amine, N-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-decyl ether) amine, N,N-bis-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-octyl ether) amine, N-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-octyl ether) amine, N,N-bis-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-2-ethylhexyl ether) amine, N-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-2-ethylhexyl ether) amine, N,N-bis-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-hexyl ether) amine, N-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-hexyl ether) amine, N,N-bis-(3-dimethylaminopropyl)-N-(2-hexanol) amine, N-(3-dimethylaminopropyl)-N-(2-hexanol) amine, N,N-bis-(3-dimethylaminopropyl)-N-(2-octanol) amine, N-(3-dimethylaminopropyl)-N-(2-octanol) amine, N,N-bis-(3-dimethylaminopropyl)-N-(2-decanol) amine, N-(3-dimethylaminopropyl)-N-(2-decanol) amine, N,N-bis-(3-dimethylaminopropyl)-N-(2-dodecanol) amine, N-(3-dimethylaminopropyl)-N-(2-dodecanol) amine, N,N-bis-(3-dimethylaminopropyl)-N-(2-tetradecanol) amine, N-(3-dimethylaminopropyl)-N-(2-tetradecanol) amine, N,N-bis-(3-dimethylaminopropyl)-N-(2-hexadecanol) amine, N-(3-dimethylaminopropyl)-N-(2-hexadecanol) amine, N,N-bis-(3-dimethylaminopropyl)-N-(2-octadecanol) amine, N-(3-dimethylaminopropyl)-N-(2-octadecanol) amine; N,N-bis-(3-dimethylaminopropyl)-N-(2-hydroxypropyl butyl ether) amine; and N,N-bis-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-neodecanoic ester) amine.

11. (previously presented) The method of claim 10, wherein the catalyst composition is selected from the group consisting of N,N-bis-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-octadecyl ether) amine, N-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-octadecyl ether) amine, N,N-bis-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-hexadecyl ether) amine, N-(3-

dimethylaminopropyl)-N-(2-hydroxypropyl-hexadecyl ether) amine, N,N-bis-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-tetradecyl ether) amine, N-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-tetradecyl ether) amine, N,N-bis-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-dodecyl ether) amine, N-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-dodecyl ether) amine, N,N-bis-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-decyl ether) amine, N-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-decyl ether) amine, N,N-bis-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-octyl ether) amine, N-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-octyl ether) amine, N,N-bis-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-2-ethylhexyl ether) amine, N-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-2-ethylhexyl ether) amine, N,N-bis-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-hexyl ether) amine, N-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-hexyl ether) amine; N,N-bis-(3-dimethylaminopropyl)-N-(2-hydroxypropyl butyl ether) amine; and N,N-bis-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-neodecanoic ester) amine.

12. (previously presented) The method of claim 11, wherein the catalyst composition is N,N-bis-(3-dimethylaminopropyl)-N-(2-hydroxypropyl butyl ether) amine.

13. (previously presented) The method of claim 11, wherein the catalyst composition is N,N-bis-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-2-ethylhexyl ether) amine.

14. (previously presented) The method of claim 11, wherein the catalyst composition is N,N-bis-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-tetradecyl ether) amine.

15. (previously presented) The method of claim 11, wherein the catalyst composition is N,N-bis-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-dodecyl ether) amine.

16. (previously presented) The method of claim 11, wherein the catalyst composition is N,N-bis-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-neodecanoic ester) amine.

17. (previously presented) The method of claim 11, wherein the catalyst composition is a mixture of N,N-bis-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-tetradecyl ether) amine and N,N-bis-(3-dimethylaminopropyl)-N-(2-hydroxypropyl-dodecyl ether) amine.

18. (original) The method of claim 1, further comprising a gelling catalyst.

19. (original) The method of claim 18, wherein the gelling catalyst is a mono- and/or bis-(tertiary amino alkyl) urea selected from the group consisting of diazabicyclooctane (triethylenediamine), quinuclidine, substituted quinuclidines, substituted □yrrolidines, and substituted pyrrolizidines.

20. (original) The method of claim 1, further comprising a blowing catalyst.

21. (original) The method of claim 20, wherein the blowing catalyst is selected from the group consisting of bis-dimethylaminoethyl ether, pentamethyl-diethylenetriamine, higher permethylated polyamines, 2-[N-(dimethylaminoethoxyethyl)-N-methylamino]ethanol, alkoxylated polyamines, imidazole-boron compositions, and amino propyl-bis(aminoethyl)ether compositions.

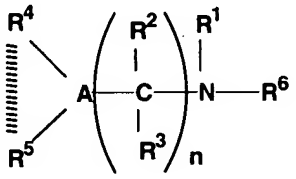
22. (original) The method of claim 1, which comprises reacting the following components in parts by weight (pbw):

Polyol	20-100
Polymer Polyol	80-0
Silicone Surfactant	1-2.5
Blowing agent	2-4.5
Crosslinker	0.5-2
Catalyst	0.25-2
Isocyanate Index	70-115

23. (original) The method of Claim 1 in which the catalyst composition is acid-blocked with a carboxylic acid.

24. (original) The method of Claim 23 in which the carboxylic acid is formic acid, acetic acid, 2-ethyl-hexanoic acid, gluconic acid, or N-(2-hydroxyethyl)-iminodiacetic acid.

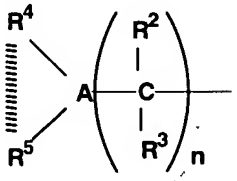
25. (previously presented) In a method for preparing a polyurethane foam which comprises reacting an organic polyisocyanate and a polyol in the presence of water as a blowing agent, a cell stabilizer, and a catalyst composition, the improvement of enabling the reaction between water and isocyanate to cause blowing of the foam while maintaining and controlling the physical properties of the foam which comprises using a catalyst composition represented by formula (I):



(I)

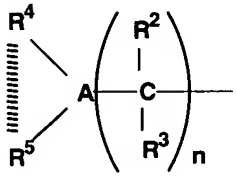
wherein A represents CH or N;

R^1 represents hydrogen and R^6 represents $-CH_2C(R^7)(OH)CH_2OR^8$; or

R^1 represents  and R^6 represents $-CH_2C(R^7)(OH)CH_2OR^8$; or

R^1 represents $-CH_2C(R^7)(OH)CH_2OR^8$ and R^6 represents an alkyl or alkenyl group having C_4-C_{36} carbon atoms; or

R^1 represents hydrogen and R^6 represents $-CH_2C(R^7)(OH)R^8$; or

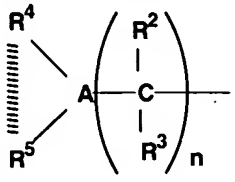
R^1 represents  and R^6 represents $-CH_2C(R^7)(OH)R^8$; or

R^1 represents $-CH_2C(R^7)(OH)R^8$ and R^6 represents an alkyl or alkenyl group having C_4-C_{36} carbon atoms;

R^2 and R^3 each represent hydrogen or an alkyl or alkenyl group having C_1-C_6 carbon atoms;

R^4 and R^5 each represent an alkyl group having C_1-C_6 carbon atoms when A represents N; or

R^4 and R^5 together represent a C_2-C_5 alkylene group when A represents N; or

R^4 and R^5 together represent a C_2-C_5 alkylene group containing NR^{10} or NR^{11} when A is CH or N, where R^{10} is hydrogen or an alkyl group having C_1-C_4 carbon atoms and R^{11} is an alkyl group having C_1-C_4 carbon atoms or 

;

R^7 represents hydrogen or an alkyl or alkenyl group having C_1-C_5 carbon atoms;

R^8 represents an alkyl or alkenyl group having C_4-C_{36} carbon atoms or $-COR^9$, where R^9 represents an alkyl or alkenyl group having C_3-C_{35} carbon atoms; and

n is an integer from 1 to 3, and where the catalyst composition is acid-blocked with a carboxylic acid.